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ARTICLE

Phonetic variables in African Frenches: Social variation in Kinshasa French vowel systems

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Abstract

Despite growing interest in African varieties of French, few attempts have been made to examine them from a variationist perspective. This contribution aims to use phonetic variation as a vantage point for exploring language ideologies surrounding the use of French in postcolonial contexts. The study focuses on the French variety spoken in Kinshasa, the capital of the Democratic Republic of Congo, and draws on a bilingual Lingala–French dataset elicited from L1 Lingala speakers. The sample reflects a key social distinction in Kinshasa: that between long-term urban residents and recent rural migrants. Are there multiple phonetic varieties of Kinshasa French? To what extent do their forms merely reflect variation in Lingala? The study finds that the most focused variety of Kinshasa French is strongly associated with urban women and is approximated to varying degrees by rural migrants, particularly women. In addition to features with likely origins in either rural or urban Lingala, Kinshasa French exhibits hypercorrect forms and features that may mirror variation trends in Parisian French.

Résumé

Malgré un intérêt croissant pour les variétés africaines du français, peu de tentatives ont jusqu'à présent été faites pour les examiner sous un angle variationniste. L'objectif de cette contribution est d'utiliser la variation phonétique comme point d'observation permettant d'entrevoir les idéologies linguistiques entourant l'usage du français dans des contextes postcoloniaux. L'étude porte sur la variété de français parlée à Kinshasa, la capitale de la RDC, en s'appuyant sur un corpus bilingue lingala-français recueilli auprès de locuteurs natifs du lingala. Cet échantillon reflète une distinction sociale marquante : celle entre les citadins de longue date et les migrants ruraux récents. Existe-t-il une ou plusieurs variétés phonétiques du français de Kinshasa ? Dans quelle mesure leurs formes ne sont-elles que le reflet de la variation en lingala ? L'étude révèle que la variété la plus stabilisée du français de Kinshasa est fortement associée aux femmes urbaines, et approximée à des degrés divers par les migrants ruraux, en particulier les femmes. Au-delà de certaines caractéristiques pouvant être partiellement rattachées au lingala, qu'il soit rural ou urbain, cette variété présente des traits hypercorrects ainsi que des traits pouvant refléter des tendances de variation en français parisien.

Keywords: Sociophonetics; Language contact; Africa; Congo RDC; Postcolonial Frenches

Mots-clés: Sociophonétique; Contact linguistique; Afrique; Congo RDC; Français postcoloniaux

1. Introduction

Postcolonial second language (L2) varieties of French have not been widely described in their social variation patterns. The angle from which descriptions have been attempted is often dialectological, using limited speaker samples. Part of the explanation for this research gap could have to do with a theoretically grounded bias, which one could phrase as follows: many postcolonial L2 French varieties are confined to formal domains, which causes them to lack a vernacular component, typically developed in informal interactions. Without a vernacular component, a variationist analysis seems problematic since the variationist paradigm characteristically envisages variation in terms of frequencies of alternations between vernacular and supralocal/standard features across social categories. Another potent theoretical bias is derived from early SLA perspectives: L2 varieties of the ex-colonial language (to which I will henceforth be referring as L2 postcolonial varieties) form 'interference varieties', or in other words, their distinctive features are predictably transferred from first languages. This study rejects such biases, assuming that postcolonial L2 French varieties are conversationally so enmeshed with local languages in informal contexts that it warrants studying patterns in it, with the prediction that it displays variation between more transfer-like and less transfer-like features across social categories.

This study seeks to illustrate this point based on phonetic variation in the French varieties spoken in Kinshasa, capital of Congo DRC, where French coexists as an official language with Lingala, a widespread indigenous lingua franca. The question that this study asks is: To what extent can Kinshasa French varieties be characterized as a continuum of features ranging from low-status features, probably transferred from Lingala, to supralocal features less directly relatable to Lingala? To answer this question, I administered Lingala and French reading tasks to a sample of 28 female and male informants aged 20–24, residing in Kinshasa, and with Lingala as a first language. In addition to the gender distinction, a distinction was made between informants who grew up in Kinshasa and informants who recently migrated to Kinshasa, as the latter belong to a social category with predictably lower social status than long-term urban residents. The total number of analysed phonetic tokens is 7,167, comprising 1,454 Lingala vowels and 5,713 French vowels.

The study is structured as follows. Section 1 presents the variationist and SLA paradigms and their explicit or implicit biases towards the study of L2 postcolonial language varieties and a counterargument to these biases. Section 2 reviews models and typologies of postcolonial L2 English and French varieties. Section 3 presents the socio-historical and sociolinguistic profile of Congo DRC. Section 4 formulates variation scenarios and details the methodology employed to test their validity. Section 5 analyses variation in Lingala vowels, while Sections 6 and 7 analyse variation in French vowels. Section 8 takes a holistic statistical perspective to the encountered variation while linking it to social factors. Finally, Section 9 situates the findings in a variationist perspective, including a reflection on sociolinguistic indexicalities of Lingala and French variants in the context of Kinshasa.

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2. Variationism and L2 postcolonial language varieties

Variation in first languages (L1) and second languages (L2) has traditionally been treated from different theoretical perspectives. Established by Labov (1973), 'First-Wave' variationist sociolinguistics takes the 'vernacular' as a point of departure (Eckert 2012). Labov (1973) describes the vernacular as the 'first variety acquired during childhood', which makes it the linguistically most regular. It contrasts with 'supralocal' or 'standard' varieties, acquired during schooling, by being stigmatized: It may possess 'covert prestige' by being a valued index of local solidarity, but it does not possess 'overt prestige', which is the preserve of standard/supralocal varieties, overtly promoted by the educational system and socio-economically dominant groups. From a First-Wave perspective, variation is accounted for in terms of frequencies of alternation between vernacular and supralocal/standard features across contexts and social categories, defined as gender and social class (see also Labov 2001). Labov comes to the following generalizations: Vernacular features are primarily associated with informal contexts, lower classes, and men, while standard/supralocal features are primarily associated with formal contexts, higher classes, and women. Labov expounds on the concept of "hypercorrection". It refers to a type of behaviour that Labov associates with women and lower middle-classes, that is, categories that he sees as particularly aspiring to ascend the socio-economic hierarchy. He also relates it, indirectly, to L2 acquisition processes in what he calls 'ethnic hypercorrection', a phenomenon he observed among specific immigrant communities in New York, characterized by avoidance of transfer from heritage languages into English (Labov 2001: 248). However, variationist sociolinguistics does not generally pay attention to L2 varieties. Supposedly acquired at school, they do not display a vernacular component, which consequently makes them linguistically irregular, prone to 'free variation', and thus unlikely to display correlations with social categories.

The systematic study of L2 varieties has been mostly undertaken within the Second Language Acquisition (SLA) paradigm. In its early forms influenced by Contrastive Analysis, SLA attributed "errors" during the L2 acquisition process to influences from the L1. Lado (1957) labels these as 'positive' or 'negative transfer' (a term often used interchangeably with 'interference', see Odlin 2012), which proceed from correct or incorrect analogies made by the learner between the target language (TL) and the L1. Selinker's (1972) concept of 'interlanguage' broke with that view: While he still views transfer as a feature of interlanguages, it is not the only one: some TL features may be found in overgeneralized form, and thus bear no relation to either the TL or the L1. This makes the interlanguage a separate, part-'fossilized' linguistic system located in between the L1 and TL. In its more recent developments, SLA research paid attention to external factors with an impact on L2 acquisition, among which it recognized input, motivation, and socialization. Learner agency is also given a role in the development of the interlanguage, construed as a strategy of L2 identity constructions (Herschensohn & Young-Scholten 2013). The study of L2 postcolonial language varieties was originally perceived as falling within the remit of SLA, as Quirk et al. (1972) implied when they referred to postcolonial L2 Englishes as 'interference varieties'. Kachru (1985) contested that position, arguing that postcolonial L2 Englishes were, in fact, varieties of their own right, with

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a 'norm-developing' and 'indigenizing' character, which qualifies them as objects of sociolinguistic study to which SLA generalizations do not apply.

To say that L2 postcolonial language varieties tend to develop norms amounts to claiming that they develop the linguistically regular characteristics that Labov (2001) named as an attribute of vernaculars. Studies in the field of social dialectology demonstrated that a second vernacular can be acquired on top of the first one until mid-adolescence (Siegel 2010). Given the normative ideologies that they carry, it might seem debatable to compare the acquisition of ex-colonial languages to that of 'second dialects', unless one equates their 'norm-developing', 'indigenizing' tendencies to 'vernacularization'. Various studies of postcolonial practices, such as Meeuwis & Blommaert (1998) or Myers-Scotton (2002) have shown how deeply conversationally enmeshed indigenous and L2 postcolonial language varieties are, including in the informal contexts that Labov associates the vernacular with. In the process of conversational amalgamation, they may come to form separate 'mixed codes', with distinctive linguistic features, a notion that Muysken (2013) captured in his concept of 'congruent lexicalization' (see also Auer 1998). But how fixed can such linguistic features become? Trudgill's (2004) posits that 'linguistic focusing', which implies the reduction of 'free variation', occurs as a function of repeated face-to-face accommodation, which, in the long term, leads to mutual convergence between speakers' varieties. Therefore, if mutually enmeshed indigenous and L2 postcolonial language varieties serve as regular mediums of interaction in informal contexts, there is no reason to assume that linguistic focusing does not simultaneously apply to the indigenous language and L2 postcolonial language variety components of mixed repertoires. This assumption is especially justified in contexts, such as the one discussed in this study, where the ex-colonial language is introduced from an early stage as a medium of instruction, possibly in a way that makes it prone to focusing, as are acquired second dialects (see Section 3). In other words, there is a case for examining variation in L2 postcolonial language varieties from a variationist perspective, which this article aims to do.

3. Modelling variation in L2 postcolonial language varieties

The most systematic sociolinguistic efforts in modelling variation and change in postcolonial L2s have been undertaken within the World Englishes paradigm, as notably illustrated by Schneider's (2007) Dynamic Model. That model posits a succession of socio-historical stages, each characterized by different degrees of alignment with the colonial power's linguistic norms. 'Nativization', to which Kachru (1985) had referred as 'indigenization', coincides with the emergence of locally distinctive linguistic features. 'Event X', a watershed moment that usually takes the form of national independence, likely ushers in 'endonormative stabilization', whereby the former colonial norm loses its normative power. Largely based on socio-historical observations made on native Englishes spoken in Great Britain's former settlement colonies, that model claims to also apply to the 'Outer Circle', comprised of former exploitation colonies where English mostly just functions as an L2. Schneider problematically assumes that every postcolonial English arises from a merger between native English varieties spoken by Europeans

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(the 'settler strand' or STL) and L2 varieties spoken by indigenous populations (the 'indigenous strand' or IDG), even in settings where Europeans were hardly present and where English only started spreading in earnest after independence via mass education rather than via interactions with European populations (see also Mesthrie & Bhatt 2008 for a critique). Given the limited exposure to native varieties, it could then be, as Schneider (2007: 44, 66) admits, that postcolonial L2 Englishes inevitably come to develop local norms, in which transfer from native languages likely plays a major role. It remains open to question what form the variation dynamics assume within an IDG disconnected from an STL, such as particularly which social group leads in setting linguistic prestige norms.

Socio-historical discussions of how postcolonial French varieties emerged have tended to focus on native varieties in North America's former French settlements, as well as on French Caribbean Creoles. Discussions of L2 French varieties do not attempt to model their patterns of variation and changes. It is not clear whether 'Event X', which Schneider (2007) links to independence in the Outer Circle, applies to Francophone Africa, much of which has – until recently – maintained close links to France. Pending such reflections, the scholarship on Africa's L2 French varieties has focused on formulating typologies of contact in Francophone Africa. A major distinction is made between settings where French is mostly spoken in formal domains and others where it has additionally functioned as an informal lingua franca. The former case could be illustrated by Chad: French coexists with a local low-status lingua franca, namely, Chadian Arabic. In the latter case, as exemplified by Ivory Coast's Abidjan region, French functions as a neutral medium against a multiethnic and multilingual backdrop (Vigouroux 2022; Gadet et al. 2009). Each of the two contact types produces different variation patterns, to which the existing sociolinguistic literature has thus far paid little attention. Following Trudgill's logic, French as a lingua franca likely develops focused local forms by being used for repeated face-to-face accommodation. The convergence that this process implies might mean that substratal effects from the various indigenous languages are hindered. By contrast, where monolingual forms of French are only used in formal domains, and thus probably less frequently than where it is used as a lingua franca, one could expect it to display stronger substratal effects and a lack of linguistic focusing if it is not a regular component of informal multilingual practices. This article discusses whether this scenario applies to French in Kinshasa, the capital of Congo DRC, where Lingala is widely described as a hegemonic lingua franca.

4. Sociolinguistic background

Congo DRC is a central African country with an estimated population of 105.9 million and a total surface that ranks it as the second-largest country in Africa. Its colonial history starts in the late 19th century when the 1885 Berlin Conference awarded it to Belgium's King Leopold II as private property. It was taken over by the Belgian state in 1908, under which it kept on developing as an exploitation colony (Vanthemsche 2012). Independence in 1960 ushered in a period of tumult, marked by the secession of the southern provinces of South Kasai and Katanga and a European exodus. The upheaval paved the way for Mobutu Sese Seko's coup in

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1965. One hallmark of his autocratic regime was the economic and cultural campaign of Africanization ('zaïrisation' in French, after the country's new name, Zaïre) that he masterminded, a token of his relative independence from not only Belgium, but also France, which had maintained her political and economic dominance in her former dominions across the Congo River (Dunn 2003; Prunier 2024). Mobutu's fall in 1997 came amid the havoc wrought by the Rwandan Civil War and the wave of refugees that it unleashed on Zaire. The First Congo War (1996–7) finds its origins in that refugee crisis, which had seen Ugandan and Rwandan armed forces install Laurent-Désiré Kabila in power, a new period symbolically marked by the renaming of Zaïre to Congo DRC. Much of the country's subsequent history has been defined by tensions with Rwanda, which led to further conflict, especially in the eastern regions, political instability, and internal displacements (Stearns 2023).

Although French is the de facto official language, there are four 'national languages', namely, Kikongo-Kituba, Lingala, Swahili, and Tshiluba, which co-exist with over 200 'ethnic' languages country-wide. Descending from a nativized pidgin that developed during the early colonial period among northwestern ethnic groups, Lingala was promoted by the colonial regime and took hold in Kinshasa, then known as Léopoldville, where it became the lingua franca and a major first language. Turned into a symbol of *Zaïrisation*, its domains of use expanded in the postcolonial era, not least by becoming the language of the security forces and political establishment. Meanwhile, French retains its dominance in education, which it had achieved during the late colonial period (Bokamba 2018; Meeuwis 2020). Without disagreeing with accounts of Lingala as prominent in the informal sphere, one could argue that French has been making steady inroads into it, too, most visibly among these urban families who use it at home to expose their children to it (Bokamba 2018), but also through Lingala's prestigious Kinshasa variety, heavily mixed with French, by which it stands out against other Lingala varieties (Bokamba 2012; Meeuwis & Blommaert 1998).

A sociolinguistic introduction of Congo DRC cannot do without a few socioeconomic observations, which one can draw from the country's 2012 socioeconomic census (INS 2014). Considered a poor country, with three quarters of its population below the poverty line, its population and economy are still predominantly rural, with 70% of the active population employed in the agricultural sector. The non-salaried informal sector employs 88.6%. It is least hegemonic in Kinshasa, the capital, locally employing 62.7% of the active population. Kinshasa also contrasts with the rest of the country by employing the largest share of the population in the public sector (22.2% vs. 9.6% countrywide) and the private formal sector (15.1% vs. 5.7% in other urban areas). The sociolinguistic implications are that French, associated with institutions, is more visible in Kinshasa than elsewhere, while Lingala, associated with the informal sector, remains a ubiquitous competitor (Bokamba 2018). Worth noting is that internal migrants from rural areas or other cities form a salient, and plausibly stigmatized, social category in Kinshasa. The share of internal migrants amounted to 18.4% countrywide in 2012. It amounted to 14.8% in Kinshasa. Against the background of contact between French and Lingala depicted above, this article looks at French in Kinshasa, aiming to characterize

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aspects of its phonetic norms as mirrored in the (formal) speech of young L1 Lingala-speaking long-term city-dwellers and recent rural migrants.

5. Research questions and methodology

The study generally asks to what extent L1 Lingala speakers in Kinshasa pursue common phonetic norms in French and what form these norms assume. Three – possibly overlapping – scenarios are formulated:

Scenario 1:

The French phonetic variety of L1 Lingala speakers in Kinshasa is mostly defined by transfer from Lingala. This scenario is consistent with the traditional account of postcolonial varieties as 'interference varieties' (see Section 1 and also Mesthrie & Bhatt 2008).

Scenario 2:

Transfer from Lingala does not explain all features of the French phonetic variety of L1 Lingala speakers in Kinshasa. Some of its features can be attributed to conservative forms of (Belgian) French. The notion that Belgian French varieties retain normative power would fit with the notion that Belgians were the historical 'founders' of French in Congo DRC (see Mufwene 2001 for the sociolinguistic concept of 'founder'). In other words, recent developments in, say, Paris French may not have significantly reached Kinshasa.

Scenario 3:

Transfer from Lingala does not explain all features of the French phonetic variety of L1 Lingala speakers in Kinshasa. Some of its features can be attributed to alignment with recent developments in European French varieties, especially the Paris variety, predictably more visible in media than Belgian varieties.[1] This would fit with a view of the Paris variety exerting a hegemonic normative influence on Francophone Africa in general and in Congo DRC in particular.

To test these scenarios, this study examines a sample of 28 informants aged 20 to 24 and residing in Kinshasa, all students at the University of Kinshasa. It consists of two subgroups: One that was born and bred in Kinshasa proper and the other in adjoining Lingala-speaking rural regions. This subdivision reflects Kinshasa's profile as a city in which migrants are a prominent social category that might be sociolinguistically distinctive due to different histories of contact with French and stigmatization as 'outsiders'. I treat informants' social status as either long-term urban resident or recent migrant from Kinshasa's adjoining regions as a variable, to which I refer as the 'Geographic Background variable'.

[1]I am referring here to the 'Paris French variety', a subvariety of what is more generally described as 'Northern French', as some of its dynamics of change are described within the context of middle classes in Lyche & Østby (2009), a study whose findings are relevant to contextualizing variation encountered in some vowels of Kinshasa French. For features of Belgian French varieties, I refer to Hambye & Simon (2012). These authors make the important point that the label 'Belgian French' is an idealized construct that conceals considerable regional heterogeneity, against a backdrop of possible gradual alignment with Parisian norms. However, they mention features that seemingly remain distinctive of Belgian French, to which I will return during the analysis of Kinshasa French.

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Additionally, both the 'urban' and 'rural' samples exhibit gender parity, with equal numbers of women and men, which makes it possible to track the effect of the 'Gender variable'. Taking a gender-specific perspective on language data is, from a variationist perspective, highly relevant to tackling the question of what high-status linguistic norms are made of since women's language behaviours, in the Labovian perspective, tend to reflect these high-status linguistic norms more than men's language behaviours as part of a socioeconomically-driven strategy of outdoing men in high-value linguistic capital (Labov 2001; see also Cheshire 2004). Looking at Kinshasa from a variationist angle, one could expect that Kinshasa women, having histories of broader exposure to French than rural migrants, set the high-status linguistic norms for French, likely emulated by the others, primarily by rural women recently established in Kinshasa. A systematic comparison between men's and women's phonetic behaviours could accordingly reveal variants with different degrees of prestige attached to them, with the implication that (urban) women's language use can reveal what prestige norm looks like.

The informants were administered a bilingual word-reading task designed to elicit Lingala and Kinshasa French vowels systems. The reason why vowels were chosen over consonants has to do with this study's aim to contribute to the PFC project, whose word-reading task is largely designed to contrast minimal vowel pairs across French varieties (Durand et al. 2005). Besides, one intention behind looking at French vowels is to emulate the tradition pioneered by Wells (1982), and now deeply entrenched in the World Englishes Paradigm, to contrast English varieties based on their different vowel realizations.

The reading task's first component consists of a list of 80 Lingala words, which altogether sum up the Lingala vowel system. The point of administering a separate Lingala reading task is to make it possible to track transferred Lingala features into each informant's French variety by means of a systematic comparison between their Lingala and French vowel realization patterns, following the assumption – based on Flege (1987) – that Kinshasa French speakers establish interlingual identifications between French and Lingala vowels, even where the phonetic values between the two are supposed to differ from a Paris or Belgian French point of view. The number of extracted and measured Lingala vowel tokens amounts to 1,454. Accounts of Lingala, such as Meeuwis (2020), provide for a conservative and more rural seven-vowel system, along with a more innovative and urban five-vowel system. I use the IPA values for the 'conservative' Lingala vowels as parts of the names I give to Lingala vowels, albeit without an expectation that they will necessarily be matched by actual vowel realizations. The Lingala reading task also provides for as L-/i/ (as in *mosika* 'far'), L-/e/ (as in *mabé* 'bad'), L-/ɛ/ (as in *mɛ́ké* 'full'), L-/a/ (as in *kokata* 'to cut'), L-/ɔ/ (as in *mɔnɔkɔ* 'hand'), L-/o/ (as in *mɔto* 'human being'), and L-/u/ (as in *mbu* 'sea').

As mentioned above, the French reading task is based on the PFC wordlist, which can be used to elicit the whole French vowel system. All oral French vowels present in the list were encoded. To represent French vowels, I use the Paris French IPA value as part of the variable name, albeit without an expectation that the actual vowel realizations in the data match these Paris French values. The coded vowels include F-/i/ (ex-mar**i**), F-/e/ (**épée**), F-/ɛ/ (f**ê**te), F-/a/ (ex-m**a**ri), F-/ɑ/ (m**â**le), F-/u/ (f**ou** à lier), F-/y/ (m**u**ette), F-/œ/ (p**eu**ple), F-/ø/ (cr**eux**), F-/ə/ (p**e**tit), F-/ɔ/ (p**o**mme), and F-/o/ (b**eau**té).

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The list contains pairs that one can use to test the application of the Loi de Position ('LdP'), a Standard French[2] phonological rule that constrains the alternation between close-mid and low-mid vowels. The LdP stipulates that syllable structure conditions the distribution of mid-vowels, with mid-high vowels (/e/, /ø/, /o/) confined to open syllables and their mid-low counterparts (/ɛ/, /œ/, /ɔ/) to closed syllables or syllables which precede a weak syllable containing a schwa (Fagyal et al 2006). The application of LdP is marked by a range of exceptions, determined by etymology and vowel harmony. These exceptions tend to be fading in Northern France, as evidenced by recent studies of Paris speech, while they tend to be maintained in Belgium (Lyche & Østby 2009; Hansen 2012; see also Hambye & Simon 2012 and Hambye et al. 2003 for Belgium). To keep track of possible European French influences and to distinguish between possible influences along a +conservative (and more Belgian-like) and -conservative (and more Paris-like) dimension, this study's encoding protocol categorizes mid-vowels according to whether they can or cannot exhibit free variation in Paris French varieties. Table 1 summarizes which words in the reading list are coded as the variable 'F-/e/' (invariable close-mid /e/ in contemporary Paris speech), 'F-/ɛ/' (invariable open-mid /ɛ/ in contemporary Paris speech), 'F-/e-ɛ/' (variable mid-front vowel realization as either close-mid or open-mid in contemporary Paris speech). Among the words featuring F-/o/ or F-/ɔ/, there is no case where the two vowels could freely alternate in Paris French varieties.

Using the PFC list as a reading list occasionally proved problematic. Some lexemes were not known to the informants, such as *gnôle* ('hooch'), *des jeunets* (an infrequent form of 'young'), *jeûne* ('fast'), or *des genêts* (a sort of wild shrub). Such words were accordingly omitted from the count.

F1/F2-values were extracted via PRAAT at 50 percent of vowel duration. The F1/F2 values were subsequently subjected to Lobanov's normalization procedure, chosen for its aptitude to reduce physiological variation while retaining sociolinguistic variation in acoustic representations (Adank et al. 2004; Boersma & Weenink 2018). The measured French vowels total 4,362 while the total of measured Lingala vowels total 1,454.

Among the measured vowels, those singled out for analysis included all Lingala vowels, with a specific emphasis on the mid-vowels as these have been described as exhibiting socio-spatial variation. The French vowels singled out for analysis were selected based on two criteria: (1) They should be apt to mirror variation in their close Lingala equivalents, assuming that Lingala vowels are transferred into Kinshasa French, or (2) they should have no immediate Lingala equivalents, which one could assume (variably) pressures Kinshasa French speakers to use features exogenous to their L1 system. The French vowel selection that meets criterion (1) includes the peripheral mid-vowels F-/e/, F-/e-ɛ/, F-/ɛ/, F-/ɔ/, and F-/o/, whose Lingala equivalents turn out to considerably vary depending on Geographic Background (Section 5). The French vowel selection that meets criterion (2) includes the non-back rounded and central vowels F-/y/, F-/ø/, F-/œ/, and

[2]The label 'Standard French' refers to an idealized French variety with close historical links to France and the Paris variety. It is used interchangeably with the label 'Reference French' (Detey et al. 2016: 56).

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Table 1. Mid-front vowel variables with corresponding words in word-reading list

F-/e/	F-/ɛ/	F-/e-ɛ/
fou à li**er**	ni**è**ce	f**ê**tard
ép**é**e	f**ê**te	piqu**et**
d**é**gel**er**	inf**e**ct	p**ê**cheur
m**é**decin	b**ê**tement	f**ê**ter
d**é**jeun**er**	million**ai**re	b**ai**gnoire
reli**er**	mou**e**tte	ép**ais**
piqu**é**	**e**x-femme	**e**xtraordinaire
boulevers**er**	li**è**ge	piqu**ais**
étri**er**	ni**ais**	
ni**er**	boulev**e**rser	
vous prendri**ez**	**e**x-mari	
bott**é**	li**e**rre	
étrill**er**	mi**e**tte	
beaut**é**	mu**e**tte	

F-/ə/. As such, the French vowel selection can be expected to reveal a continuum of phonetic forms ranging from more transfer-like (and thus Lingala-like) to less transfer-like (and thus possibly more exogenous, French or Belgian).

The first step in the analysis consists in mapping Lingala vowels, which Section 5 does while examining the effects of the Geographic Background variable, or in other words, distinctions in vowel realizations between long-term urban residents and recent migrants from Kinshasa's adjoining regions. The results offer a point of reference for determining which types of French vowel realizations come closest to exhibiting transfer from Lingala varieties. The analysis then proceeds to examine the realization of Kinshasa French vowels. Section 6 focuses on Kinshasa French peripheral mid-vowels, while Section 7 focuses on French non-back rounded and central vowels. As in Section 5, each of these sections examines the effects of the rural-urban and gender distinctions. Section 8 discusses to what extent the encountered variation in Kinshasa French can be attributed to Lingala transfers or alignment with exogenous norms. Section 9 verifies the validity of geographic background and gender as predictors of variation via a Principal Component Analysis (PCA) of F1/F2-means for vowel realizations across informants, viewed individually. This same section also tentatively explains the relative positioning of individual pronunciation patterns revealed by the PCA as a function of contemporary socioeconomic indicators from Congo DRC. Finally, Section 10 takes stock of the findings before discussing how they compare with variationist findings from Anglophone African countries.

6. Lingala vowels

This section forms the first step in the analysis, establishing a point of reference for the discussion in Section 8 of possible Lingala transfer into Kinshasa French varieties. The Lingala vowel plot in Figure 1 reveals some differences between the urban and rural samples. One first visible contrast concerns degrees of peripherality in the vowel space. There is a visual tendency for urban Lingala vowels to be less

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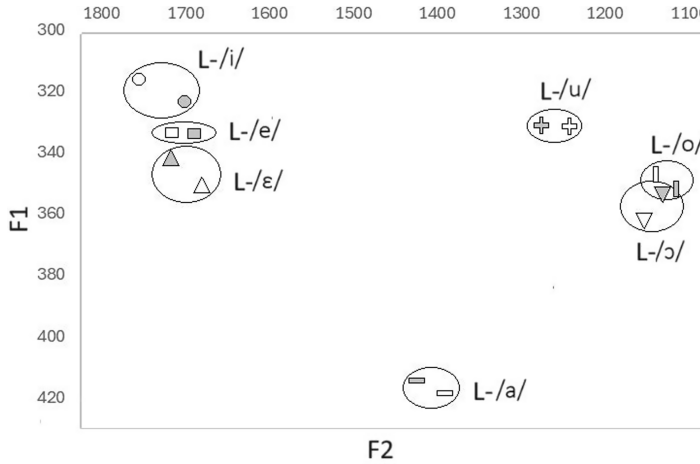

Figure 1. Normalized F1/F2 means for Lingala vowels, n=1,454. Shaded shapes stand for urban variants, blank ones for rural variants.

peripheral than their rural counterparts: This concerns urban L-/i/ and L-/e/, seemingly more retracted than their rural counterparts, as well as urban L-/u/, seemingly less backed than its rural counterpart.

Significant differences include the degrees of distinction made between the close-mid and open-mid front and back vowels. While rural L-/e/ and urban L-/e/ do not significantly contrast, urban L-/ɛ/ is significantly higher than its rural counterpart, being closer to L-/e/ (p=.0001). While rural L-/o/ and its urban counterpart do not significantly contrast, urban L-/ɔ/ is significantly higher (p=.0) and thus closer to L-/o/. Other significant differences concern /i/, higher among rural speakers than urban speakers (p=.001).

Figures 3 and 4 zoom in on individual realizations of Lingala front and back mid-vowels, respectively. Tables 2 and 3 summarizes the differences between open-mid and close-mid vowels across genders in the rural and urban samples.

From the gender-specific data used for Figures 2 and 3, one can infer that:

- Urban L-/e/ displays no significant inter-gender differences in height or fronting.
- Urban L-/ɛ/ is higher among women than among men (p=.02).
- Rural L-/e/ displays no significant inter-gender differences in height or fronting.
- Rural L-/ɛ/ displays no significant inter-gender differences in height, but it is more fronted among women than men (p=.02).
- Rural and urban L-/o/ and L-/ɔ/ display no significant inter-gender differences in height or fronting.

From Tables 2 and 3, one can infer that:

- Rural speakers and urban men assign distinctive heights to L-/e/ and L-/ɛ/. Urban women do not.

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Table 2. Differences in F1 between Lingala front and back mid-vowels

Group	F1 mean L-/e/	SD	F1 mean L-/ɛ/	SD	Mean difference	T(df)	p
Rural women	336.0197	5.839101	346.8139	9.343381	10.79416	6	.02
Rural men	329.8377	8.220125	351.1086	9.640689	21.27094	6	.0008
Urban women	331.6763	6.53903	336.4719	8.526506	4.79559	6	.26
Urban men	336.8019	4.800447	347.7249	7.782578	10.92299	6	.01
	F1 mean L-/o/	SD	F1 mean L-/ɔ/	SD	Mean difference	T(df)	p
Rural women	342.213	9.227653	358.0172	10.88839	15.8042	6	.01
Rural men	344.0222	7.515055	366.1202	11.27803	22.09805	6	.001
Urban women	347.2664	7.673207	347.2396	5.924433	−0.02687	6	.99
Urban men	355.313	10.99458	354.0221	13.77834	−1.29085	6	.84

Table 3. Differences in F2 between Lingala front and back mid-vowels

Group	F2 mean L-/e/	SD	F2 mean L-/ɛ/	SD	Mean difference	T(df)	p
Rural women	1755.132	28.33908	1736.502	22.31463	−18.6299	6	.19
Rural men	1726.798	33.08113	1676.095	52.25113	−50.7029	6	.05
Urban women	1713.217	24.06461	1721.182	27.07357	7.965484	6	0.57
Urban men	1728.305	52.71299	1716.356	39.48642	−11.9488	6	0.64
	F2 mean L-/o/	SD	F2 mean L-/ɔ/	SD	Mean difference	T(df)	p
Rural women	1178.969	43.69001	1187.959	56.38453	8.990174	6	.7
Rural men	1152.808	80.11027	1198.512	49.59637	45.70404	6	.22
Urban women	1127.175	52.39683	1133.93	56.15398	6.75572	6	.8
Urban men	1184.964	55.13733	1183.342	17.37108	−1.62239	6	.94

- L-/e/ and L-/ɛ/ do not differ in fronting across the sample.
- Rural speakers assign distinctive heights to L-/o/ and L-/ɔ/. Urban speakers do not.
- L-/o/ and L-/ɔ/ do not differ in fronting across the sample.

The fact that urban women appear to merge L-/e/ and L-/ɛ/ is, from a Labovian perspective, a strong signal that merged L-/e/ and L-/ɛ/ possess high status. Urban women could indeed be leading an ongoing merger: An indication in this regard is that urban men's L-/ɛ/ is higher than rural men's while not contrasting in height with rural women's. This suggests that both urban men and rural women orient to some degree to urban women's merging of L-/e/ and L-/ɛ/. Meanwhile, the fact that the heights of urban L-/o/ and L-/ɔ/ do not display significant differences among

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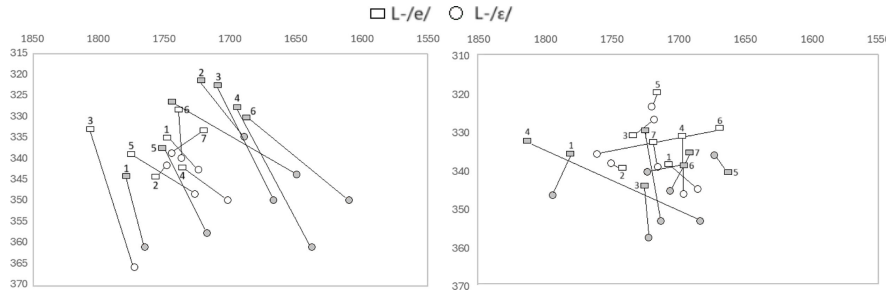

Figure 2. L-/e/ and L-/ɛ/ among urban speakers (1-7) and rural speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. Shaded shapes stand for men's realizations, blank ones for women's. The horizontal ruler stands for F2, the vertical one for F1.

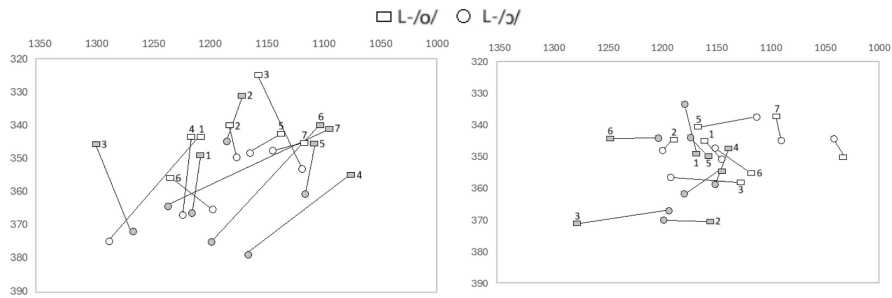

Figure 3. L-/o/ and L-/ɔ/ among urban speakers (1-7) and rural speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. Shaded shapes stand for men's realizations, blank ones for women's. The horizontal ruler stands for F2, the vertical one for F1.

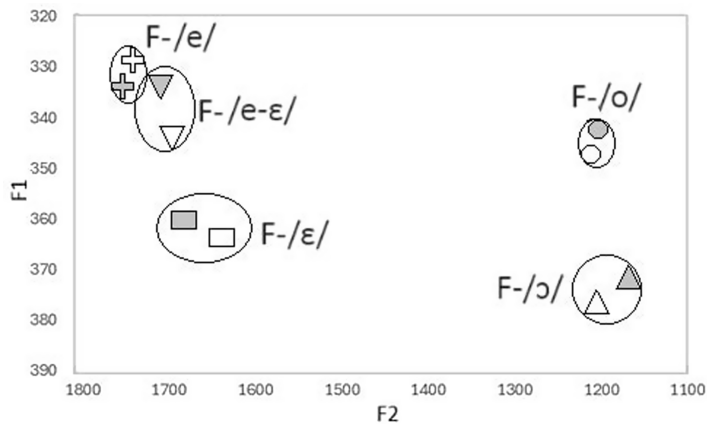

Figure 4. Kinshasa French peripheral mid-vowels, n=2,058. Shaded shapes stand for urban variants, blank ones for rural variants.

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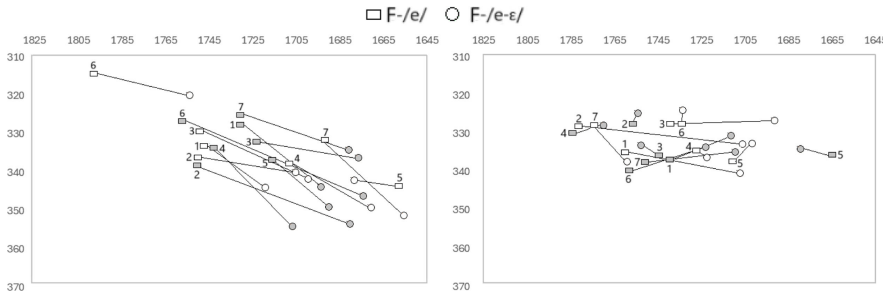

Figure 5. F-/e/ and F-/e-ɛ/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. The horizontal ruler stands for F2, the vertical one for F1. Shaded shapes stand for men's realizations, blank ones for women's.

either women or men suggests that the two vowels have completed their merger in Kinshasa Lingala.

The contrast between the rural and urban samples in mid-vowel height reflects observations made in the scholarly literature on variation in Lingala. As mentioned in the methodology section, rural Lingala is said to display a full seven-vowel system (i, e, ɛ, a, ɔ, o, u) while Kinshasa Lingala only exhibits a reduced system without the mid-low vowels /ɛ/ and /ɔ/ (Meeuwis 2020). The origin of Kinshasa Lingala's reduced vowel system resides in its Kikongo substrate: the area's dominant native language during early colonial times, Kikongo, steadily lost visibility during the urbanization process while leaving phonetic traces behind (Meeuwis 2020; see also De Boeck 1953). Women's apparent predilection for higher [e]-like variants of L-/ɛ/ likely is a measure of the prestige attributed to Kinshasa Lingala while possibly manifesting an ongoing shift throughout the Lingala speech community from a seven-vowel system to a five-vowel system.

7. Kinshasa French peripheral mid-vowels

Figure 5 plots the Kinshasa French peripheral mid-vowels based on their F1 and F2 means. One major visual contrast between the rural and urban samples appears in the height of F-/e-ɛ/, whose urban variant is higher than its rural counterpart. It appears similar in height to urban F-/e/ while being more retracted. Urban back mid-vowels appear higher and more backed than their rural counterparts. The visually observable contrast between urban and rural F-/e-ɛ/ proves significant, with the urban variant being higher than the rural variant (p=.0). In contrast, F-/e/, and F-/ɛ/ do not significantly differ across the urban and rural samples. Height differences in back mid-vowels prove significant with urban F-/ɔ/ higher than rural F-/ɔ/ (p=.04). Differences in backing also prove significant for F-/ɔ/, with the urban variant being more backed than the rural variant (p=.01).

To obtain a more fine-grained picture of the variation in Kinshasa French peripheral mid-vowels suggested above, Figures 5 through 7 zoom in on their individual realizations. Figures 5, 6, and 7 focus on individual distinctions between F-/e/ and F-/e-ɛ/, F-/e/ and F-/ɛ/, F-/o/ and F-/ɔ/, respectively.

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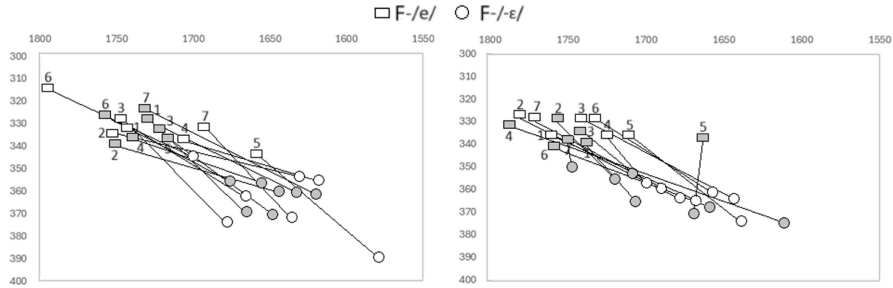

Figure 6. F-/e/ and F-/ɛ/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. The horizontal ruler stands for F2, the vertical one for F1. Shaded shapes stand for men's realizations, blank ones for women's.

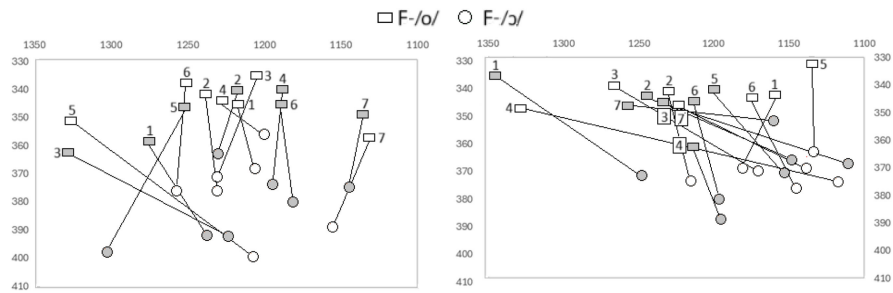

Figure 7. F-/o/ and F-/ɔ/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. The horizontal ruler stands for F2, the vertical one for F1. Shaded shapes stand for men's realizations, blank ones for women's.

From the individual data used for Figures 5 through 7, one can infer that:

- Urban and rural F-/e/, F-/e-ɛ/, and F-/ɛ/ display no inter-gender differences in height or fronting.
- Urban women's and urban men's F-/e-ɛ/ is higher than rural men's (p=.005 and p=.002, respectively) but not higher than rural women's.
- Urban and rural F-/o/ and F-/ɔ/ display no inter-gender differences in height or fronting.
- F-/o/ displays no inter-gender differences between the rural and urban samples in either height or fronting.
- F-/ɔ/ displays no inter-gender height differences between the rural and urban samples.
- Urban women realize F-/ɔ/ in a more backed position than rural women and men (p=.008 and p=.02, respectively).

Tables 4 through 7 summarize the differences between Kinshasa French peripheral mid-vowels across genders in the rural and urban samples.

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Table 4. Differences in F1 between Kinshasa French front peripheral mid-vowels

Group	F1 mean F-/e/	SD	F1 mean F-/e-ɛ/	SD	Mean difference	T(df)	p
Rural women	332.8841	9.12	341.6789	10.01	8.79	6	.11
Rural men	331.9446	5.23	345.9158	7.81	13.97	6	.002
Urban women	331.4965	3.89	333.21	5.82	9.12	6	0.53
Urban men	335.2766	4.34	331.8022	3.76	−2.92	6	0.1
	F1 mean F-/e/	SD	F1 mean F-/ɛ/	SD	Mean difference	T(df)	p
Rural women	332.8841	9.12	365.6029	13.74405	32.7188	6	.0003
Rural men	331.9446	5.23	362.6509	5.815389	30.7063	6	.0
Urban women	331.4965	3.89	363.3284	5.121877	31.8319	6	.0
Urban men	335.2766	4.34	361.571	9.113951	26.2944	6	.0

Table 5. Differences in F2 between Kinshasa French front peripheral mid-vowels

Group	F2 mean F-/e/	SD	F2 mean F-/e-ɛ/	SD	Mean difference	T(df)	p
Rural women	1728.928	28.33908	1697.695	33.33	−57.437	6	.004
Rural men	1736.066	33.08113	1686.216	11.5	−40.582	6	.01
Urban women	1746.082	24.06461	1717.56	23.06515	4.343	6	.73
Urban men	1742.588	52.71299	1729.051	31.90453	0.746	6	.97
	F2 mean F-/e/	SD	F2 mean F-/ɛ/	SD	Mean difference	T(df)	p
Rural women	1728.928	28.33908	1651.527	43.54211	−77.401	6	.005
Rural men	1736.066	33.08113	1648.837	18.88309	−87.229	6	.0
Urban women	1746.082	24.06461	1670.245	22.23109	−75.837	6	.0
Urban men	1742.588	52.71299	1688.539	45.45088	−54.049	6	.03

From Tables 4 through 7, one can infer that:

- Rural women do not assign distinctive heights to F-/e/ and F-/e-ɛ/. Rural men do, with their F-/e-ɛ/ lower.
- Urban speakers do not assign distinctive heights to F-/e/ and F-/e-ɛ/.
- Urban women's F-/e/ and F-/e-ɛ/ display no contrast in fronting. Elsewhere, F-/e-ɛ/ is less fronted than F-/e/.
- All distinguish between F-/e/ and F-/ɛ/ in height and fronting, irrespective of geographic background or gender.
- Women and men assign different heights to F-/o/ and F-/ɔ/ in both the rural and urban samples.
- Rural speakers and urban women, similarly back F-/o/ and F-/ɔ/. In contrast, urban men back F-/o/ more than F-/ɔ/.

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Table 6. Differences in F1 between Kinshasa French back peripheral mid-vowels

Group	F1 mean F-/o/	SD	F1 mean F-/ɔ/	SD	Mean difference	T(df)	p
Rural women	345.0644	7.3	378.6591	15.18	33.6	6	**.0004**
Rural men	349.5875	8.52	382.4995	12.62	39.91	6	**.0001**
Urban women	342.2836	5.86	371.736	4.47	29.45	6	**.0**
Urban men	346.26	7.49	371.8153	11.23	25.54	6	**.0004**

Table 7. Differences in F2 between Kinshasa French back peripheral mid-vowels

Group	F2 mean F-/o/	SD	F2 mean F-/ɔ/	SD	Mean difference	T(df)	p
Rural women	1228.167	58.14364	1213.63	32.04694	−14.5363	6	.54
Rural men	1227.67	63.81958	1216.138	49.67679	−11.5315	6	.71
Urban women	1217.051	67.37374	1157.467	33.20537	−59.5842	6	.06
Urban men	1246.499	53.31608	1173.23	44.05495	−73.2692	6	**.01**

The fact that Kinshasa French peripheral mid-vowels are kept systematically distinct suggests that they do not mirror ongoing Lingala mergers (Section 5). The fact that urban F-/e-ɛ/ is higher than the rural variant amounts to saying that urban speakers tend to neutralize the opposition in pairs such as *épée-épais*. The opposition is in fact absent among both urban and rural women. This means that they align more with the Paris French variety as far as the alternation between open-mid and close-mid front vowels is concerned (Section 4). The fact that rural women partly follow them in this behaviour, in which they contrast with rural men, suggests that generalized LdP in French mid-front vowels is attributed high prestige by Kinshasa's rural migrants.

8. Kinshasa French non-back rounded and central vowels

Figure 8 plots the interior vowels based on their F1 and F2 means. One visible contrast concerns degrees of centralization, with the urban variants of F-/y/, F-/ø/, and F-/œ/ appearing more centralized than their rural counterparts. In other words, urban F-/y/ tend more towards a [u]-like value while rural F-/y/ tends more towards Standard French [y]. Rural F-/ø/ and F-/ɛ/ appear less distinct than their urban counterparts.

Among the differences named above, only that involving F-/ø/ is significant, with the urban variant being more centralized than the rural one (p=.01). There are thus no significant distinctions between rural and urban F-/y/, F-/œ/, and F-/ə/.

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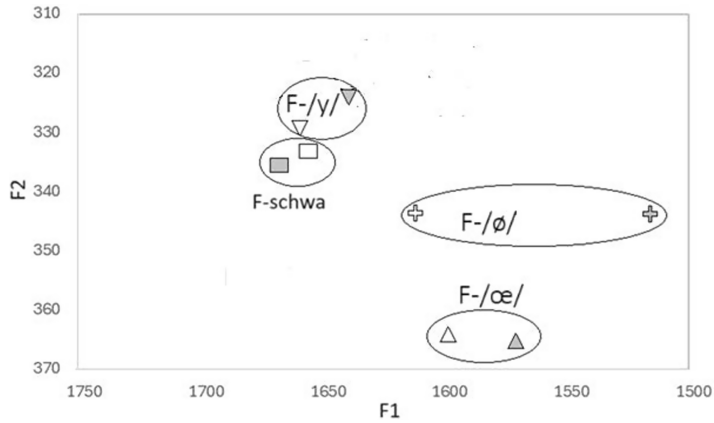

Figure 8. F1/F2 means for Kinshasa French non-back rounded + central vowels, n=664. Shaded shapes stand for urban variants, blank ones for rural variants.

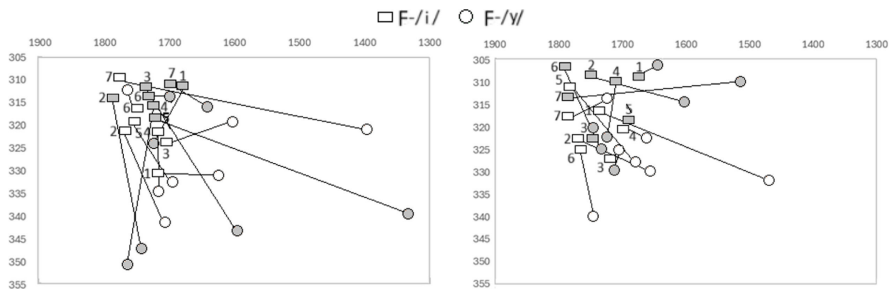

Figure 9. F-/i/ and F-/y/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The left-hand plot shows rural realizations, the right-hand plot urban realizations. The horizontal ruler stands for F2, the vertical one for F1. Shaded shapes stand for men's realizations, blank ones for women's.

To obtain a more fine-grained picture of the variation in Kinshasa French non-back rounded and central vowels suggested above, Figures 9 through 12 zoom in on their individual realizations. The figures focus on individual distinctions between F-/i/ and F-/y/, F-/e/ and F-/ø/, F-/ɛ/ and F-/œ/, and F-/ɛ/ and F-/ə/, respectively.

From the individual data used for Figures 8 through 12, one can infer that:

- Rural F-/y/ displays no inter-gender differences in height or fronting. In contrast, urban women's F-/y/ is lower than urban men's (p=.04).
- F-/y/ displays no inter-gender height or fronting differences between the rural and urban samples.
- Rural and urban F-/ø/ display no inter-gender differences in height or fronting.
- Urban men's and women's F-/ø/ is more centralized than rural women's (p=.002).

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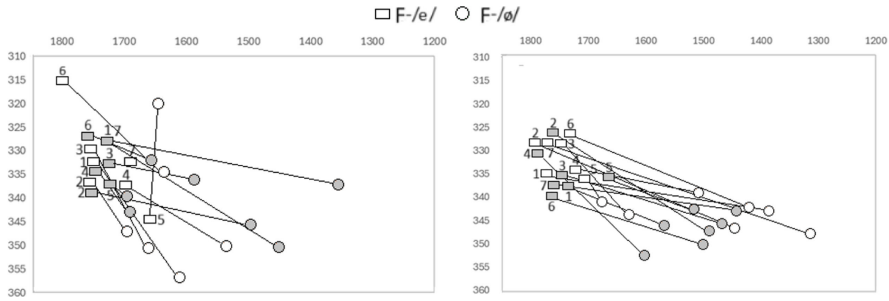

Figure 10. F-/e/ and F-/ø/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The horizontal ruler stands for F2, the vertical one for F1. The left-hand plot shows rural realizations, the right-hand plot urban realizations. Shaded shapes stand for men's realizations, blank ones for women's.

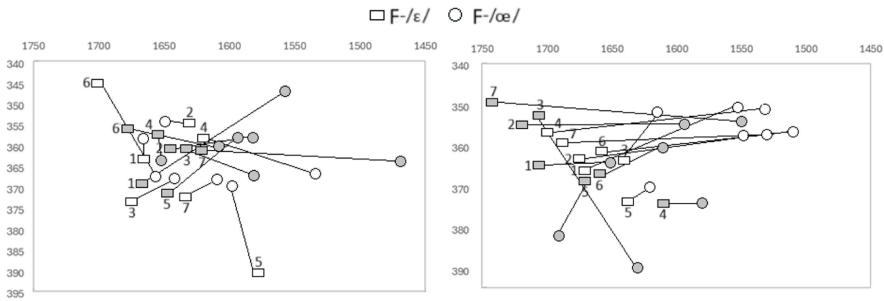

Figure 11. F-/ɛ/ and F-/œ/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The horizontal ruler stands for F2, the vertical one for F1. The left-hand plot shows rural realizations, the right-hand plot urban realizations. Shaded shapes stand for men's realizations, blank ones for women's.

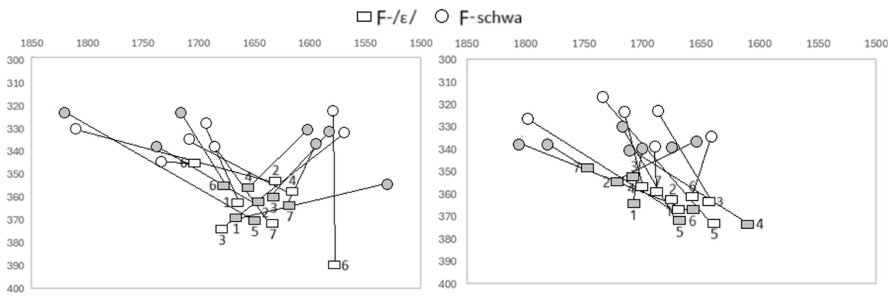

Figure 12. F-/ɛ/ and F-/ə/ among rural speakers (1-7) and urban speakers (1-7), normalized Hertz values. The horizontal ruler stands for F2, the vertical one for F1. The left-hand plot shows rural realizations, the right-hand plot urban realizations. Shaded shapes stand for men's realizations, blank ones for women's.

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Table 8. Differences in F1 and F2 between Kinshasa French F-/i/ and F-/y/

Group	F1 mean F-/i/	SD	F1 mean F-/y/	SD	Mean difference	T(df)	P
Rural women	319.9389	6.492724	327.3246	10.30388	7.385709	6	0.139
Rural men	314.8319	2.132914	333.3297	15.16053	18.49784	6	**0.01**
Urban women	319.5191	4.67096	327.6599	8.229039	8.14	6	**0.047**
Urban men	312.8896	7.230692	317.4087	9.187438	4.51	6	0.327
	F2 mean F-/i/	SD	F2 mean F-/y/	SD	Mean difference	T(df)	P
Rural women	1745.039	23.32016	1646.548	122.1267	−98.4918	6	0.077
Rural men	1729.069	32.25946	1643.389	149.0669	−85.6808	6	0.183
Urban women	1754.202	31.7275	1662.975	92.05682	−91.227	6	**0.04**
Urban men	1730.859	45.5443	1686.87	86.51359	−43.989	6	0.264

Table 9. Differences in F1 and F2 between Kinshasa French F-/e/ and F-/ø/

Group	F1 mean F-/e/	SD	F1 mean F-/ø/	SD	Mean difference	T(df)	P
Rural women	332.8841	9.12	345.532	13.99518	12.6479	6	.07
Rural men	331.9446	5.23	340.323	6.214362	8.3784	6	**.018**
Urban women	331.4965	3.89	343.8911	3.065596	12.3946	6	**.0**
Urban men	335.2766	4.34	347.3179	3.560617	12.0413	6	**.0001**
	F2 mean F-/e/	SD	F2 mean F-/ø/	SD	Mean difference	T(df)	P
Rural women	1728.928	28.33908	1625.239	52.24511	−103.689	6	**.001**
Rural men	1736.066	33.08113	1562.929	132.3814	−173.137	6	**.013**
Urban women	1746.082	24.06461	1485.546	128.289	−260.536	6	**.001**
Urban men	1742.588	52.71299	1512.187	56.87932	−230.401	6	**.0**

- Rural F-/œ/ displays no inter-gender differences in height or fronting. In contrast, urban women's F-/œ/ is more centralized than urban men's (p=.03).
- F-/œ/ displays no inter-gender height and fronting differences between the rural and urban samples.
- Rural and urban F-/ə/ display no inter-gender differences in height or fronting within and between samples.

Tables 8 through 11 summarize the differences between Kinshasa French peripheral mid-vowels across genders in the rural and urban samples.

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Table 10. Differences in F1 and F2 between Kinshasa French F-/ɛ/ and F-/œ/

Group	F1 mean F-/ɛ/	SD	F1 mean F-/œ/	SD	Mean difference	T(df)	P
Rural women	341.6789	10.01	365.7174	5.936146	24.0385	6	.904
Rural men	345.9158	7.81	362.6509	6.484705	16.7351	6	.452
Urban women	333.21	5.82	363.3921	6.714724	30.1821	6	.056
Urban men	331.8022	3.76	361.571	13.96469	29.7688	6	.3
	F2 mean F-/ɛ/	SD	F2 mean F-/œ/	SD	Mean difference	T(df)	P
Rural women	1697.695	33.33	1643.62	46.27867	−54.075	6	.38
Rural men	1686.216	11.5	1648.837	55.72452	−37.379	6	**.014**
Urban women	1717.56	23.06515	1667.571	41.61802	−49.989	6	**.0001**
Urban men	1729.051	31.90453	1688.539	46.86869	−40.512	6	**.011**

Table 11. Differences in F1 and F2 between Kinshasa French F-/œ/ and F-/ə/

Group	F1 mean F-/ɛ/	SD	F1 mean F-/ə/	SD	Mean difference	T(df)	P
Rural women	341.6789	10.01	333.1515	6.559397	8.5274	6	**.0006**
Rural men	345.9158	7.81	335.7555	10.65281	10.1603	6	**.0002**
Urban women	333.21	5.82	328.9178	8.792748	4.2922	6	**.0**
Urban men	331.8022	3.76	336.9688	4.128416	−5.1666	6	**.0001**
	F2 mean F-/ɛ/	SD	F2 mean F-/ə/	SD	Mean difference	T(df)	P
Rural women	1697.695	33.33	1683.786	83.23106	13.909	6	.281
Rural men	1686.216	11.5	1653.215	104.1801	33.001	6	.916
Urban women	1717.56	23.06515	1672.892	112.6136	44.668	6	.906
Urban men	1729.051	31.90453	1719.129	54.58052	9.922	6	.277

From Tables 8 through 11, one can infer that:

- Rural women and urban men do not distinguish in height or fronting between F-/i/ and F-/y/.
- Rural men's F-/i/ and F-/y/ have different heights, with their F-/y/ lower than their F-/i/. Urban women distinguish between their F-/i/ and F-/y/ in both height and fronting, with their F-/y/ lower and more centralized than their F-/i/.
- Rural women do not distinguish between their F-/e/ and F-/ø/. Rural men do, with their F-/ø/ lower and more centralized than their F-/e/.

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Table 12. Comparison between peripheral French mid-vowels and their plausible Lingala equivalents (F1)

Group	F1 mean F-/e/	SD	F1 mean L-/e/	SD	Mean difference	T(df)	p
Rural	332.4143	7.162469	332.9287	7.56386	0.5144	13	.85
Urban	333.3865	4.426573	334.2391	6.119142	0.8526	13	.67
	F1 mean F-/e-ɛ/	SD	F1 mean L-/e/	SD	Mean difference	T(df)	P
Rural	343.7973	8.906834	332.9287	6.119142	−10.8686	13	**.001**
Urban	332.5061	4.767913	334.2391	7.56386	1.733	13	.41
	F1 mean F-/ɛ/	SD	F1 mean L-/ɛ/	SD	Mean difference	T(df)	P
Rural	364.1841	10.94525	348.9612	9.389052	−15.2229	13	**.0005**
Urban	362.4816	7.303314	342.0984	9.777623	−20.3832	13	**.0**
	F1 mean F-/ɔ/	SD	F1 mean L-/ɔ/	SD	Mean difference	T(pdf)	P
Rural	380.0324	13.13782	362.0687	11.44993	−17.9637	13	**.0006**
Urban	371.7756	8.216767	350.6308	10.77982	−21.1448	13	**.0**
	F1 mean F-/o/	SD	F1 mean L-/o/	SD	Mean difference	T(df)	P
Rural	347.326	7.979821	343.1176	8.13922	−4.2084	13	.17
Urban	344.2761	6.788988	351.2897	10.01985	7.0136	13	**.04**

- Urban women and men distinguish between their /F-e/ and F-/ø/ in height and fronting with their F-/ø/ lower and more centralized than their F-/e/.
- F-/ɛ/ and F-/œ/ generally differ in height. In contrast, they exhibit different degrees of fronting, with F-/œ/ being more centralized than F-/ɛ/, except in the case of rural women.
- F-/ɛ/ and F-/ə/ generally differ in height. In contrast, they do not exhibit any differences in degrees of fronting.

In sum, F-/i/ and F-/y/ appear merged among rural women, as do F-/e/ and F-/ø/. The former merger is also found among urban men. The broadest range of distinctions between the vowels described above is found among urban women. Irrespective of geographic background and gender, there is a common tendency to realize F-/ə/ in a relatively fronted position close to that of F-/ɛ/.

9. Detecting features transferred from Lingala

Tables 12 through 15 compare F1 and F2 of the French vowels discussed in the preceding sections and their plausible Lingala equivalents, showing in each case standard deviations, mean differences, degrees of freedom, and *p*-values. This comparison is expected to reveal which group is more prone to transferring from Lingala into their French variety or to hypercorrect phonetic behaviours. Due to space limitations, gender-specific information is not comprised in the tables, but it is commented on in the subsequent analysis.

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Table 13. Comparison between peripheral French mid-vowels and their plausible Lingala equivalents (F2)

Group	F2 mean F-/e/	SD	F2 mean L-/e/	SD	Mean difference	T(df)	P
Rural	1732.497	32.93496	1740.965	33.04384	8.468	13	.5
Urban	1744.335	30.83987	1720.761	40.13761	−23.574	13	.09
	F2 mean F-/e-ɛ/	SD	F2 mean L-/e/	SD	Mean difference	T(df)	P
Rural	1691.955	24.68928	1740.965	33.04384	49.01	13	**.0001**
Urban	1723.306	27.40231	1720.761	40.13761	−2.545	13	.84
	F2 mean F-/ɛ/	SD	F2 mean L-/ɛ/	SD	Mean difference	T(df)	P
Rural	1646.228	30.38856	1706.299	49.7225	60.071	13	**.0008**
Urban	1678.055	36.15428	1718.769	32.62191	40.714	13	**.004**
	F2 mean F-/ɔ/	SD	F2 mean L-/ɔ/	SD	Mean difference	T(pdf)	P
Rural	1214.262	40.20909	1193.236	51.30892	−21.026	13	.23
Urban	1165.349	38.36089	1158.636	47.45471	−6.713	13	.68
	F2 mean F-/o/	SD	F2 mean L-/o/	SD	Mean difference	T(df)	P
Rural	1227.918	58.65321	1165.889	63.46059	−62.029	13	**.01**
Urban	1231.775	60.33628	1156.069	59.74433	−75.706	13	**.002**

The following can be inferred from the tables:

- No distinction is made between F-/e/ and L-/e/, irrespective of geographic background. No gender-based variation is found either. This implies that F-/e/ could very well form a transfer of L-/e/.
- Based on group means, urban speakers do not distinguish between L-/e/ and F-/e-ɛ/, while rural speakers do, with their F-/e-ɛ/ lower and more retracted than their L-/e/. Gender differences appear: It is rural men that realize their F-/e-ɛ/ in a lower position than L-/e/ (p=.002), while rural women do not. This implies that urban F-/e-ɛ/ could form a transfer of Lingala F-/e/, while rural men's F-/e-ɛ/ shows no connection with their L-/e/.
- Based on group means, rural speakers and urban speakers both realize their F-/ɛ/ in a lower and more retracted position than their L-/ɛ/. Gender differences appear: It is more (rural and urban) women that retract F-/ɛ/ away from L-/ɛ/ (p=.0004 and .001, respectively).
- Based on group means, both rural speakers and urban speakers realize their F-/ɔ/ in a lower position than their L-/ɔ/. The group means reveal no distinctions between F-/ɔ/ and L-/ɔ/ in backing. However, urban women tend to back it away from their L-/ɔ/ (p=.01).
- No-one distinguishes between F-/o/ and L-/o/, irrespective of geographic background or gender, which could qualify F-/o/ as a transfer of L-/o/.
- Urban F-/y/ and L-/i/ are distinguished in height but not in degrees of fronting, irrespective of gender. Rural men distinguish between the two in height

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Table 14. Comparison between non-back rounded French vowels and their plausible Lingala equivalents (F1)

Group	F1 mean F-/y/	SD	F1 mean L-/i/	SD	Mean difference	T(df)	P
Rural	330.3271	12.8371	314.4795	7.439199	−15.8476	13	**.0006**
Urban	322.5343	9.924945	321.8062	7.088754	−0.7281	13	**.003**
	F1 mean F-/ø/	SD	F1 mean L-/e/	SD	Mean difference	T(df)	P
Rural	342.9275	10.74842	332.9287	6.119142	−9.9988	13	**.009**
Urban	345.6045	3.653831	334.2391	7.56386	−11.3654	13	**.0**
	F1 mean F-/œ/	SD	F1 mean L-/ɛ/	SD	Mean difference	T(df)	P
Rural	339.0775	6.486075	348.9612	9.389052	9.8837	13	**.0001**
Urban	338.4627	12.21264	342.0984	9.777623	3.6357	13	**.0**
	F1 mean F-/ə/	SD	F1 mean L-/ ɛ /	SD	Mean difference	T(df)	P
Rural	334.4535	8.605819	348.9612	9.389052	14.5077	13	**0.0002**
Urban	332.9433	7.810266	342.0984	9.777623	9.1551	13	**0.01**

Table 15. Comparison between non-back rounded French vowels and their plausible Lingala equivalents (F2)

Group	F2 mean F-/y/	SD	F2 mean L-/i/	SD	Mean difference	T(df)	P
Rural	1644.968	130.9287	1776.454	67.75209	131.486	13	.82
Urban	1674.922	86.71477	1730.185	81.51066	55.263	13	.09
	F2 mean F-/ø/	SD	F2 mean L-/e/	SD	Mean difference	T(df)	P
Rural	1594.084	101.9483	1740.965	33.04384	146.881	13	**.000107**
Urban	1498.866	96.33432	1720.761	40.13761	221.895	13	**.0**
	F2 mean F-/œ/	SD	F2 mean L-/ɛ/	SD	Mean difference	T(df)	P
Rural	1500.545	54.38297	1706.299	49.7225	205.754	13	**.0**
Urban	1487.826	51.5393	1718.769	32.62191	230.943	13	**.0**
	F2 mean F-/ə/	SD	F2 mean L-/ ɛ /	SD	Mean difference	T(pdf)	P
Rural	1668.501	91.96843	1706.299	49.7225	37.798	13	.19
Urban	1696.01	88.33841	1718.769	32.62191	22.759	13	.37

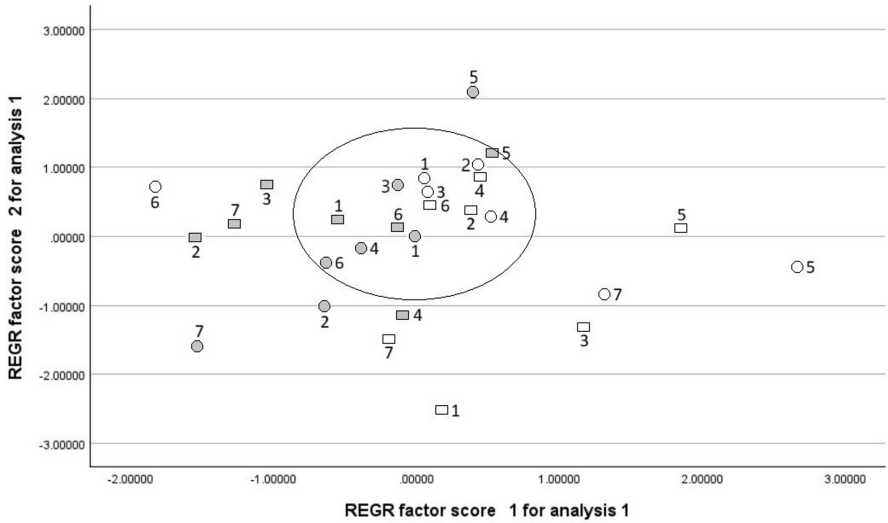

Figure 13. Principal Component Analysis of individual vowel realization patterns. Circles stand for the urban informants, rectangles for the rural informants. Rectangles stand for men, circles for women. Grayed shapes stand for urban speakers, blank ones for rural speakers.

(p=.007) and rural women in fronting (p=.008). One should remember that L-/i/ is more retracted among urban speakers, which means that urban F-/y/ ends up more retracted than its rural counterpart even while displaying the same frontness properties as urban L-/i/ (Section 5).

- F-/ø/ is kept distinct from L-/e/ and F-/œ/ from F-/ɛ/ in degrees of fronting, irrespective of geographic background and gender. Based on group means, they differ in height, with F-/ø/ lower than L-/e/ and F-/œ/ higher than L-/ɛ/. However, rural women do not distinguish between F-/ø/ and L-/e/ in height while rural men do not distinguish between F-/œ/ and F-/ɛ/ in height.
- Based on group means, F-/ə/ differs from L-/ɛ/ in height while it is not backed away from it. However, urban women do not distinguish between F-/ə/ and L-/ɛ/ in height, an indication that urban women's F-/ə/ could be a Lingala transfer.

In summary, a complex picture emerges: F-/e/ and F-/o/ could be Lingala transfer, as well as F-/e-ɛ/ in the specific case of the urban speakers. The other French vowels display what could be partial Lingala influence, combined with features that could be attributed to transfer avoidance. That strategy can be specific to women in general, as exemplified by their realization of F-/ɛ/, or to urban women in particular, as exemplified by their fronting of F-/ɔ/. Urban speakers may, irrespective of gender, exhibit transfer avoidance, as visible in the heights of their F-/ø/ and F-/œ/. In other cases, it is the rural speakers that, irrespective of gender, exhibit more transfer avoidance, as visible in the height and fronting of their F-/y/.

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Table 16. Mean F1 and F2 values of Kinshasa French peripheral mid-vowels within and outside cluster

	F-/e/	F-/e-ɛ/	F-/ɛ/	F-/ɔ/	F-/o/
In cluster	F1: 334.1978 F2: 1737.599	F1: 340.0711 F2: 1702.012	F1: 362.4159 F2: 1660.847	F1: 372.5676 F2: 1193.099	F1: 342.8513 F2: 1226.139
Outside cluster	F1: 332.4693 F2:1740.369	F1: 335.8023 F2: 1713.787	F1: 364.4205 F2: 1664.891	F1: 379.1484 F2: 1192.238	F1: 347.9402 F2: 1239.843

Table 17. Mean F1 and F2 values of Kinshasa French non-back rounded vowels within and outside cluster

	F-/y/	F-/ø/	F-/œ/	F-/ə/
In cluster	F1: 328.8132 F2: 1684.813	F1: 345.1389 F2: 1566.23	F1: 360.508 F2: 1606.803	F1: 331.5372 F2: 1706.975
Outside cluster	F1: 322.3844 F2: 1646.309	F1: 344.1697 F2: 1532.162	F1: 363.9569 F2: 1582.538	F1: 336.1235 F2: 1645.676

10. Mapping social trends in variation patterns

Figure 13 presents the results of a Principal Component Analysis ('PCA'), whose input was a table with the speaker means for Lobanov-normalized F1 and F2 for all Kinshasa French vowels described in the previous sections. A PCA is used at this stage to verify the validity of assumed social distinctions, such as that assumed by this study between urban and rural Lingala speakers. The analysis returns a Dimension 1, which accounts for 21.86% of all variance, and a Dimension 2, which accounts for 12.39%.

The *x*-axis captures a polarization between rural and urban informants, with the former scoring positively and the latter negatively on it. The plot does not reveal any clear gender polarization. One dense concentration of individuals, circled on the plot, contains most urban and rural women, along with three urban men and three rural men. This concentration represents the most focused Kinshasa French variety spoken by the informants. It is notable that this cluster forms a continuum with urban individuals concentrated on its left side and rural individuals on its right side. It is also notable that the cluster appears embedded in the plot's urban continuum of varieties. Outside of this cluster, individuals show a high degree of dispersion, albeit higher among rural than urban individuals, who, unlike the former, are all concentrated on the plot's left side.

Tables 16 and 17 show the mean values for each vowel within and outside the cluster. The focused variety is mostly marked by higher degrees of fronting in F-/y/, F-/ø/, F-/œ/, and F-/ə/. F-/e-ɛ/ is lower within the cluster than outside, while F-/ɛ/ and the back vowels are higher and less backed.

Table 18 shows the values of Lingala vowels as realized within and outside the cluster. What distinguishes the clustered individuals is their lower and more retracted L-/i/ and their higher and less backed back vowels. These features are reflected in their realizations of F-/y/ and Kinshasa French peripheral back vowels.

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Table 18. Mean F1 and F2 values of Lingala vowels within and outside cluster

	L-/i/	L-/e/	L-/ɛ/	L-/ɔ/	L-/o/
In cluster	F1: 318.359 F2: 1729.132	F1: 334.1593 F2: 1734.018	F1: 345.5493 F2: 1719.643	F1: 355.2515 F2: 1178.557	F1: 345.0937 F2: 1163.748
Outside cluster	F1: 315.4393 F2: 1749.032	F1: 333.0852 F2: 1728.129	F1: 345.5129 F2: 1706.372	F1: 357.3017 F2: 1173.664	F1: 349.0322 F2: 1158.58

The cluster's variety is generally marked by a lower F-/i/ and a lower and more fronted F-/y/. Its F-/y/ and F-/i/ are less distinct in fronting. The cluster's variety distinguishes more strongly between F-/e/ and F-/e-ɛ/, which is lower. Its F-/ɔ/ and F-/o/ are less distinct and higher. Its F-/ø/, F-/œ/, and F-/ə/ are more fronted and less distinct from F-/e/ or F-/ɛ/. On average, the clustered individuals' French varieties mirror their Lingala varieties to some extent: Taken together, they display a lower L-/i/, as well as unmerged L-/e/ and L-/ɛ/, which are reflected in the cluster's lower F-/y/ and distinct F-/e/ and F-/e-ɛ/, respectively. Additionally, the lower distinction between French peripheral mid-vowels mirrors urban Lingala patterns of alternation between mid-vowels.

If one takes a closer look at women's behaviours within the cluster, two major distinctions soon come into view. First, the cluster's urban women merge their F-/e/ and F-/e-ɛ/, in line with group means for urban women in general (Section 5), while the rural women do not. Second, the cluster's urban women centralize their non-back rounded vowels more than the off-cluster average, in line with means-based findings in Section 6, while the rural women front them. Despite these contrasts, the women found within the cluster share the other tendencies named above that set the cluster's variety apart from off-cluster varieties.

Due to its density, the cluster's variety could be taken to represent what form the most consensual phonetic norms of Kinshasa French. Besides, the fact that it is dominated by women, whom the Labovian paradigm associates with high-status linguistic norms, qualifies it as potentially representative of what counts as the high-status phonetic norm for Kinshasa French. Based on the cluster's means for F-/e-ɛ/, one could be tempted to tie the cluster's variety to conservative forms of Standard French that retain exceptions to LdP (Section 4). But, as said earlier, this conservative feature is, upon close inspection, heavily associated with the cluster's rural women, not with the cluster's urban women. When considering the generally fronted character of its F-/ø/ and F-/œ/, one could conversely be tempted to see strong Lingala influence and, therefore, an indigenization dynamic at work in the cluster's variety. But then again, the cluster's urban women strongly centralize these vowels, suggesting that hypercorrect centralizing behaviours co-define the cluster's variety. More likely to afford a glimpse into emergent consensual norms, the distinctive tendencies commonly shared by the cluster's urban and rural women reveal an inclination to less hypercorrection than found in the off-cluster varieties. The chief indications in this regard include the lesser degrees of height distinction between peripheral mid-vowels and the higher fronting of F-/y/ and F-/ə/. These features suggest stronger Lingala influence and, accordingly, a stronger inclination to indigenization inside than outside

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the cluster. In other words: If one considers the cluster's variety to be indicative of emergent high-status norms in Kinshasa French, then some transferred properties of the Lingala vowel system could very well be part of them.

Do the shared phonetic tendencies within the cluster's variety mean that European French models are losing normative power in the Kinshasa context? The distribution of idiolects on the PCA plot might suggest otherwise. As noted above, the cluster's variety forms a continuum in which urban and rural women do not overlap. While one could see in this an indication that rural women stay apart, one could also see in their sheer presence inside the cluster a manifestation of rural speakers being receptive to urban norms, or in other words, a case of ongoing rural-to-urban convergence that one could suspect eventually leads to rural speakers adopting urban features. This would include the merger of F-/e/ and F-/e-ɛ/, which one could either see as a reflection of urban Lingala influence or as urban Lingala influence facilitated by its compatibility with Parisian French patterns of front mid-vowel alternation (Sections 4 and 6). Urban features that rural speakers could be expected to eventually adopt might also include centralizing behaviours in F-/ø/ and F-/œ/, a feature that speaks to the enduring normative power of European French models in the Kinshasa context while invalidating characterizations of Kinshasa French as a bundle of 'interference varieties'. Hypercorrection or what Mesthrie (2017) calls 'substrate erasure' is thus likely set to remain a strategy of sociolinguistic differentiation, at least in specific vowel realizations.

Despite the PCA returning a cluster of idiolectal varieties, one could object to the notion that linguistic focusing, which lies at the heart of emergent norms, can be occurring at all in the Kinshasa context. After all, there are enough indications that Lingala prevails over French as a lingua franca in Kinshasa (Section 3). As a result, one could argue that accommodation and convergence – the dynamics that participate in focusing – can only occur in Lingala, making Lingala more than French eligible for linguistic focusing. However, one should not forget that urban Lingala is, in practice, a combination of Lingala and French (Section 3). Using that combination as a lingua franca thus exposes not only Lingala but also French to convergence strategies. In other words, appropriating urban Lingala, the prestige variety of Lingala, may very well amount to simultaneously appropriating the Kinshasa French varieties that it is conversationally interlaced with. Following the psycholinguistic logic of priming, whereby contiguous elements from Languages A and B may influence one another in the form of linguistic crossovers, including of a phonetic nature (Kootstra & Muysken 2019), one cannot be surprised at the fact that the French variety of urban speakers mirrors the ongoing merger between L-/e/ and L-/ɛ/ in urban Lingala. While one could be tempted to see in this merger in the cluster's French variety a transfer from Lingala, one should not lose sight of the possibility that French and Lingala may also be converging with one another at various linguistic levels, including phonetic (Myers-Scotton 2002). One illustration in this regard could be the cluster variety's F-/y/, whose lower character is matched by urban L-/i/.

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11. Discussion

This study combined group means of Lingala and Kinshasa French vowels with a PCA of Kinshasa French vowels to map variation in Kinshasa French. Urban and rural Lingala speakers in Kinshasa tend to be distinguishable based on how they realize Lingala and French vowels. Group means revealed significant contrasts between the urban and rural groups. Urban speakers tend to merge Lingala mid-vowels while their rural peers keep them more distinct. Among the main distinctions in French vowel realizations that were found in French varieties as spoken by urban and rural informants are the following:

- Urban speakers merge the pair *épée-épais*, while rural speakers keep it distinct.
- Urban speakers centralize F-/ø/ (*creux*) more than rural speakers.
- Urban speakers distinguish less than rural speakers between F-/o/ (*pot*) and F-/ɔ/ (*rhinocéros*).

A look at gender means for vowel realizations within the rural and urban samples reveals that women and men tend to significantly differ in their French vowel realizations. For example, urban women's F-/y/ (*muette*) is lower and F-/œ/ (*meurtre*) more centralized than urban men's.

The distinction between French high and low mid-vowels is retained in the French varieties of both urban speakers and rural speakers. Mergers between French vowels could be observed among rural women between F-/y/ and F-/i/ (*muette* and *six*), between F-/ø/ and F-/e/ (*creux* and *rhinocéros*), and between F-/ɛ/ and F-/œ/ (*sept* and *meurtre*). In contrast, there is a stronger tendency in the urban sample to distinguish between vowel pairs, such as F-/y/ and F-/i/, F-/ø/ and F-/e/, F-/œ/ and F-/ɛ/. An important observation is that none of the sample gender components makes a significant distinction between F-/e/ and F-/e-ɛ/ (*épée-épais*) except for rural men, a potential sign of alignment with Parisian patterns of front mid-vowel alternation. Another important observation is that F-/ɛ/ and F-/ə/ (*muette*, *petit*) exhibit no contrast in fronting irrespective of geographic background or gender, a feature not compatible with Standard French that may have become entrenched in Kinshasa French.

The contrasting of group means for Kinshasa French vowels and their most plausible Lingala equivalents revealed a continuum of Lingala influence ranging from full Lingala transfer to partial Lingala transfer. Cases of plausible full Lingala transfer generalized across groups include F-/e/ and F-/o/, while urban F-/e-ɛ/ could form a transfer of Lingala L-/e/ and urban women's F-/ə/ a transfer of L-/ɛ/. Cases of plausible partial full Lingala transfer include F-/y/, whose degree of fronting matches that of L-/i/.

Rural men's tendency to conservatively maintain the distinction between F-/e/ and F-/e-ɛ/ in the pair *épée-épais* fits with Nimbona & Steien's (2019) view that it is generally maintained in African Frenches, such as CAR French or Malian French (see also Bordal 2012 and Lyche & Skattum 2012). The fact that long-term city dwellers in Kinshasa erase that distinction suggests in turn that Kinshasa French differs from these other African French varieties, although the lack of comparability between samples makes such a conclusion hazardous. Meanwhile, Boutin et al.

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(2012) report on a possibly similar phenomenon in Dakar French in the form of a tendency to favour F-/e/ over F-/ɛ/, although the fact that this phenomenon occurs irrespective of syllabic context makes it potentially distinct from what one can observe in Kinshasa French. Finally, the tendency noted among the rural informants to front French non-backed rounded vowels, more specifically F-/ø/, is reported for Malian French, whose substrates have, like Lingala, no rounded front vowels (Lyche & Skattum 2012).

The PCA plot offered a glimpse into what the most focused phonetic varieties of Kinshasa French look like. The urban women who speak these varieties share a tendency to centralize their F-/ø/ and F-/œ/ more, which seems to bring them more in line with European French models. One could also argue that the loss of distinction in the *épée-épais* pair in urban women's speech could be facilitated by alignment with Parisian French norms.[3] Considering the initial assumption that urban women are most likely to set high-status norms for Kinshasa French, one could argue that European French models retain normativity in specific vowel realizations. European French models also retain normative power among rural speakers, especially among men, who seem to display more hypercorrection than their female peers by avoiding Lingala influence more while orienting more to exogenous models. Meanwhile, the fact that all female speakers of the focused Kinshasa French variety commonly tend to distinguish less between the heights of French peripheral mid-vowels and the degree of fronting of F-/y/ and F-/i/, all reminiscent of Lingala patterns, suggests potential for indigenization in the high-status varieties of Kinshasa French. Put in a Labovian perspective, these un-European features could be manifesting a change from below with roots in the Lingala component of Kinshasa repertoires, paving the way for a high-status French variety with some de-stigmatized Lingala-like features.

Overall, the dynamics of hypercorrection detailed above fit with Scenario 3 although they apply to certain vowel realizations more than others and co-vary with geographic background. Meanwhile, Kinshasa French varieties are still marked by some receptivity to full or partial transfer from Lingala, in line with Scenario 1, as illustrated by, among other things, evidence of Lingala transfer in the rural informants' varieties. Interestingly, some vowel realizations display some Lingala influence across the board. This notably includes F-/ə/, which displays high fronting incompatible with European French models. Finally, support for Scenario 2 could perhaps be found in the fact that rural men occasionally display conservative Standard French (and possibly Belgian) patterns in front mid-vowel realization, even though these could also be explained as transfer from rural Lingala varieties.

Women-driven ethnic hypercorrection as evidenced in urban women's centralizing behaviours in Kinshasa French F-/ø/ and F-/œ/ has been reported in other African urban settings, such as in the Namibian English varieties spoken in Windhoek, Namibia (Stell 2022a, 2022b, 2023). Another feature that Kinshasa French shares with Namibian English is the evidence of indigenization dynamics: Exogenous models, in this case South African ones, are only loosely approximated,

[3]There is a Congolese tradition, going back to colonial times, of favouring Paris-based norms over Belgian ones, which renders plausible the notion of Parisian influence behind the merger between F-/e/ and F-/ɛ/ (Hulstaert 2018).

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except among the local European-descended population. Importantly, in the same way as (urban) women lead in the linguistic focusing of Kinshasa French varieties, Namibian (urban) women display the most focused English varieties. In both settings, urban women's varieties seem to exhibit the attributes of high-status linguistic targets while room remains for a pattern of stable variation between variants with exogenous connections and L1-influenced ones, more associated with men. From a Labovian perspective, this distribution of variants suggests that – bar specific indigenizing features – exogenous forms in L2 postcolonial language varieties retain high-status while transferred features are associated with low status.

12. Conclusion

Kinshasa French shows signs of focusing into a variety simultaneously marked by hypercorrect orientation to European French models while also exhibiting high-status indigenizing features. One may want to suspect Parisian influence in how front mid-vowels alternate in the urban forms of Kinshasa French, although its mid-vowels may as well mirror the effect of transfer from Kinshasa Lingala. Looking at urban women's phonetic behaviours, which one can assume are representative of high-status norms in the Kinshasa context, one can glimpse the traces of a normative ideology that stigmatizes certain Lingala-like vowel realizations, such as fronted French non-back non-rounded vowels. However, the room for exogenous normative ideologies to keep impacting the further development of Kinshasa French could be limited and the potential for indigenization conversely enhanced by the dominance of Lingala as a lingua franca, which might set Congo DRC apart from other Francophone African settings, such as Ivory Coast, where French is reported to be more widespread as a lingua franca in monolingual form and thus possibly more insulated from substratal influences and, by implication, from indigenization dynamics.

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